AMENDMENTS TO THE DRAWINGS

Before examination on the merits, please amend Fig. 10 as described below, per the accompanying replacement drawing.

Adjust the position of the lead line for the reference number 109.

Add cross-hatching to the spool 110, and reaction pin 112.

Before examination on the merits, please amend Fig. 11 as described below, per the accompanying replacement drawing.

Adjust the position of the lead line for the reference number 114.

Add the orifice at the location indicated by reference number 114.

Add cross-hatching to the spool 110, and reaction pin 112.

Adjust the position of the lead line for the reference number 109.

AMENDMENTS TO THE SPECIFICATION

Please amend Paragraph 30 as follows.

[0030] In the illustrated embodiment, each of the layers 12, 14, and 16, include four relatively large holes 22 formed therethrough. Each of these holes 22 preferably is substantially disposed adjacent the four corners of the substantially rectangular layers 12, 14, and 16, but can be at any suitable location. The holes 22 are used as bore holes for a fastener for securing each of the layers 12, 14 and 16 together, as well as for attaching the valve assembly 10 to another device, containing or connecting with the balance of the fluid system of which the valve assembly 10 is a part. The openings formed in the center plate 14 and the port plate 16, including the holes 22, may be formed by any suitable method such as etching, conventional or laser drilling, milling, or other suitable machining method. Similarly, the channels formed in the center plate 14 can be formed by any suitable process, such as a milling process or by etching. It is preferred that the openings formed on the first layer (cover plate) 12, including the holes 22, are formed by etching. It can be appreciated, however, that any of the openings and channels can be formed using any suitable process. The layers 12, 14, and 16 may be formed by any suitable means. For example, the layers may be formed by being cut from metallic sheet stock or being machined from individual blanks. The various holes and channel features can be formed thereon subsequently by machining or etching, or otherwise forming, those features into the layers 12, 14, and 16. Alternatively, the various holes and channel features, or other desired features, may be formed in the layers 12, 14, and 16 coincident with the initial fabrication of the layers 12, 14, and 16 during a casting or molding process. Such features can also be formed using any similar process, or any suitable combination of molding, casting, machining, etching processes. The layers 12, 14, and 16 may be made of any suitable material, such as a ceramic, crystalline, composite, metal, plastic, or glass material. In a preferred embodiment, the layers 12, 14, and 16 are metallic, with steel being suitable for some anticipated applications.

Please amend Paragraph 33 as follows.

[0033] The cut out 40 is substantially centrally located on the center plate 14 and is sized to receive a spool 42. The spool 42 is substantially rectangular in shape and has a teardrop shaped opening 44 formed therethrough such that the opening 44 has a narrower end and a wider end. It is preferred that the thickness of the spool 42 is slightly less than the thickness of the center plate 14 such that the spool 42 can move axially within the cut out 40 of the center plate 14. Also formed through the spool is a bore 46 that is spaced apart from the narrower end of the teardrop opening 44 that acts a pressure balancing device. As best seen in Figs. 7 and 8, the ~~The~~ spool 42 is biased towards the ducts 34A and 34B of the center plate 14 by a spring 51 that acts on a side face 47 of the spool 42. The spring is retained within the center plate by a plug 53. A fluid of the first fluid circuit entering the cut out 40 via the ducts 34A and 34B preferably acts on a ~~the opposite~~ side face 49 of the spool 42 opposite the side face 47 against which the spring bears.. Thus, as will be explained below, fluid pressure will force the spool 42 against the bias of the spring 51 to create a second fluid circuit between a second source of fluid and a load.

Please amend Paragraph 45 as follows.

[0045] The operation of the second fluid circuit will be described next. The second fluid circuit allows fluid to flow from a source of pressurized fluid to a load. As shown in Fig. 7, the spool valve 43 is in an active position. In this position, the spring is biasing the spool 42 to the left (as shown in the Figures) and the discharge bore 54 is in fluid communication with the load bore 52 inside the opening 44. Thus, the hydraulic load can be utilized as described in the '782 patent and the '224 application, described above. As shown in Fig. 8, the spool valve is in an inactive position. In this position, fluid from the first fluid circuit will be acting upon the side face 49 of the spool 43 causing movement of the spool 42 against the bias of the spring. Movement of the spool 42 against the spring bias will cause the spool 42 to

block the discharge bore 54. Thus, the discharge bore 54 will be isolated from the load bore 52 preventing flow of pressurized fluid to the load. In the spool valve 43 position illustrated in Fig. 8, the pressure balancing bore 46 will act against provide communication from the discharge bore 54 through the spool 42 to balance pressure between the ~~a~~ lower surface ~~(and optionally an~~ and the upper surface) of the spool 42 to prevent fluid pressure from forcing the spool against the cover plate 12 and the port plate 16 which could cause the spool to bind against those plates. Thus, the spool 42 will be able to substantially smoothly slide back and forth within the cut out 40 during operation of the spool valve 43.

Please amend Paragraph 47 as follows.

[0047] In an alternate embodiment illustrated in Fig. 9, a valve assembly, indicated generally at 100, is shown having a round spool. In this embodiment, a microvalve (not shown), that is substantially the same as described in relation to the first embodiment of the invention, is connected with a cover plate 102. Bond pads 104 are preferably formed on the cover plate 102 so that the microvalve can be more easily attached to the cover plate 102. The operation of the microvalve will preferably also be substantially the same as described above. Also formed in the cover plate 102 are a plurality of ports, indicated generally at 106, that are substantially similar in design and operation to the ports (26A, 26B, 27A, 27B, 28A, 28B) described above with respect to the first layer 12.